

Attorney's Docket No. 42390P14174X

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of: )  
Xing Su, et al. ) Examiner: ~~Not Yet Assigned~~ J. Ha  
Application No.: ~~Not Yet Assigned~~ ) Art Unit: ~~Not Yet Assigned~~ 1654  
101697,682 )  
Filed: Concurrently Herewith )  
For: METHODS AND DEVICE FOR )  
ANALYTE CHARACTERIZATION )  
\_\_\_\_\_  
)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08.

All references listed on the enclosed Form PTO-1449 or PTO/SB/08 were previously identified in the parent application of the present application, and copies of the references were furnished at that time. It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

EXPRESS MAIL CERTIFICATE OF MAILING

I hereby certify that I am causing the above-referenced correspondence to be deposited with the United States Postal Service "Express Mail Post Office to Addressee" service on the date indicated below and that this paper or fee has been addressed to the Commissioner for Patents, Mail Stop Patent Application, Alexandria, VA 22313.

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Date of Deposit: October 29, 2003

Name of Person Mailing Correspondence: Debbie Peloquin

Debbie Peloquin  
Signature

October 29, 2003  
Date

Docket No.: 42390:P14174X

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Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

XX      37 C.F.R. §1.97(b).

           37 C.F.R. §1.97(c). If so, then enclosed with this Information Disclosure Statement is one of the following:

           A statement pursuant to 37 C.F.R. §1.97(e) or

           A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).

           37 C.F.R. §1.97(d). If so, then enclosed with this Information Disclosure Statement are the following:

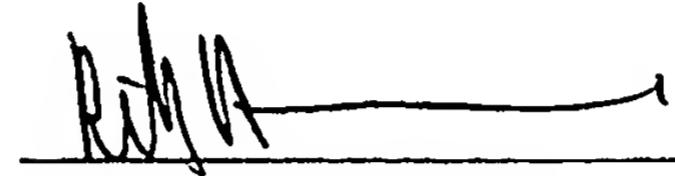
- (1)      A statement pursuant to 37 C.F.R. §1.97(e); and
- (2)      A check for \$180.00 for the fee under 37 C.F.R. §1.17(p) for submission of the Information Disclosure Statement.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: October 29, 2003

  
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Approved for use through 10/31/2002. OMB 0651-0031

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<p>Substitute for form 1449A/PTO            (modified)  <b>INFORMATION DISCLOSURE            STATEMENT BY APPLICANT</b>            (use as many sheets as necessary)</p>				<i>Complete if known</i>	
Sheet	1	of	1	Application Number	Not yet assigned
				Filing Date	Concurrently herewith
				First Named Inventor	Xing Su, et al.
				Group Art Unit	Not yet assigned 1654
				Examiner Name	Not yet assigned J. Ha
				Attorney Docket	42390P14174X

**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Figures Appear
/J.H./		4,962,037		Jett et al.	10/09/1990	
		5,306,403		Vo-Dinh	04/26/1994	
		5,332,666		Prober et al.	07/26/1994	
		5,405,747		Jett et al.	04/11/1995	
		5,436,130		Mathies et al.	07/25/1995	
		5,721,102		Vo-Dinh	02/24/1998	
		5,776,674		Ulmer	07/07/1998	
		5,783,389		Vo-Dinh	07/21/1998	
		5,814,516		Vo-Dinh	09/29/1998	
		5,821,058		Smith et al.	10/13/1998	
		5,866,336		Nazarenko et al.	02/02/1999	
		6,002,471		Quake	12/14/1999	
		6,146,227		Mancevski	11/14/2000	
		6,174,677		Vo-Dinh	01/16/2001	
↓		6,210,896		Chan	04/03/2001	

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		"Nanopore Technology, Probing Polynucleotides with a Nanopore: High Speed Single Molecule DNA Sequencing," Branton Lab – Nanopore Sequencing Description, 3 pages, downloaded from the internet on February 3, 2002.	
		KASIANOWICZ et al., "Characterization of Individual Polynucleotide Molecules Using a Membrane Channel," <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 93, pp. 13770-13773, November 1996.	

Examiner Signature	/Julie Ha/	Date Considered	Oct. 29, 2003
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



JFW

PATENT  
ATTORNEY DOCKET NO. INTEL1460-1(P14174X)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Xing Su et al.

Art Unit: Not Yet Assigned 1654

Serial No.: 10/697,682

Examiner Not Yet Assigned J. Ha

Filed: October 29, 2003

Title: METHODS AND DEVICE FOR ANALYTE CHARACTERIZATION

Mail Stop Amendment  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL SHEET

Sir:

Transmitted herewith for the above-identified application, please find:

- (1) Information Disclosure Statement (2 pages);
- (2) PTO-1449 Form (1 page);
- (3) Four (4) References;
- (4) International Search Report (8 pages); and
- (5) Return postcard;

**CERTIFICATION UNDER 37 CFR §1.8**

I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, January 26, 2005 in an envelope addressed to: Mail Stop Amendment: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Stephanie Sharrett  
Name of Person Mailing Paper  
Signature

January 26, 2005

In the Application of  
Xing Su et al.  
Application Serial No.: 10/697,682  
Filed: October 29, 2003

PATENT  
Attorney Docket No.: INTEL1460-1 (P14174X)

*C I P E JC19*  
JAN 31 2005  
PATENT & TRADEMARK OFFICE

No fee is deemed necessary in connection with the filing of these papers. However, if  
any fee is required, authorization is given to charge the amount of this fee to Deposit Account  
No. 07-1896. A duplicate copy of this Transmittal Sheet is enclosed.

Respectfully submitted,



Michael P. Reed, J.D., Ph.D.  
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Date: January 26, 2005

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PATENT  
Attorney Docket No.: INTEL1460-1 (P14174X)

Applicants: Xing Su et al.

Art Unit: ~~Not Yet Assigned~~ 1654

Serial No.: 10/697,682

Examiner ~~Not Yet Assigned~~ J. Ha

Filed: October 29, 2003

Title: METHODS AND DEVICE FOR ANALYTE CHARACTERIZATION

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. 1.97, enclosed are references relating to the above-identified application. For the convenience of the Examiner, these references are listed on the attached Form PTO-1449 and a copy of Items H through K are enclosed herewith.

It is respectfully requested that these references be considered in the examination of this application and their consideration be made of written record in the application file.

Each item contained herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.

**CERTIFICATION UNDER 37 CFR §1.8**

I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, January 26, 2005 in an envelope addressed to: Mail Stop Amendment: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Stephanie Sharrett

Name of Person Mailing Paper

Stephanie Sharrett

January 26, 2005

Signature

In re Application of:  
Su, et al.  
Application No.: 10/697,682  
Filed: October 29, 2003  
Page 2

PATENT  
Attorney Docket No.: INTEL1460-1 (P14774X)

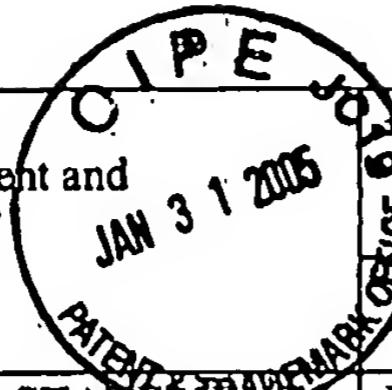
This Information Disclosure Statement is being filed prior to receipt of a First Office Action on the merits. Therefore, no fee is deemed necessary. However, the Commissioner is hereby authorized to charge any amounts required by this filing, or credit any overpayment, to Deposit Account No. 07-1896.

Respectfully submitted,

  
Michael P. Reed, J.D., Ph.D.  
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FORM PTO-1449

U.S. Department of Commerce Patent and  
Trademark Office

Docket No.:

INTEL1460-1 (P14174X)

Serial No.:

10/697,682

Applicants: Su, et al.

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANTFiling Date:  
October 29, 2003Group Art Unit:  
Unassigned

1654

## U.S. PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
/J.H./	A	6,355,420	3/12/02	Chan			
/J.H./	B	6,514,767	2/4/03	Michael Natan	436	166	
/J.H./	C	2003/059822	3/27/03	Gilmanshin et al.			
/J.H./	D	2003/207326	11/6/03	Su, et al.			

## FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION (YES/NO)
/J.H./	E	WO/01/25794	4/12/01	PCT			
/J.H./	F	WO/03/078649	9/25/03	PCT			
/J.H./	G	WO/03/106620	12/24/03	PCT			

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

/J.H./	H	Doering, et al., "Spectroscopic Tags Using Dye-Embedded Nanoparticles and Surface -Enhanced Raman Scattering", <i>Analytical Chemistry</i> , :5-9
/J.H./	I	Fisher, et al, "Lipid Binding -Induced Conformational Changes in the N-Terminal Domain of Human Apolipoprotein E", <i>J. of Lipid Res.</i> , 40(1):93-99 (January 1999)
/J.H./	J	Lillo, et al., "Design and Characterization of a Multisite Fluorescence Energy-Transfer System for Protein Folding Studies: A Steady-State and Time-Resolved Study of Yeast Phosphoglycerate kinase", <i>Biochem. Am. Chem. Soc.</i> 36(37):11261-11272 (1997).
/J.H./	K	Mulvaney, et al., "Glass-Coated, Analyte-Tagged Nanoparticles: A New Tagging System Based on Detection with Surface-Enhanced Raman Scattering", <i>Am Chem Soc.</i> 19:4784-4790 (2003).

EXAMINER G116431925.1 1090132-57	/Julie Hal/	DATE CONSIDERED Jan. 31, 2005
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.